MISCELLANEOUS.

Rediscovery of Trocheta subviridis.

To the Editors of the Annals and Magazine of Natural History.

Gentlemen,—As some difference of opinion has been expressed as to the rediscovery of this Annelide, the following extract from my notebook may be of value:—"Jan. 15 [1869]. The terrestrial leeches Pryor [Mr. M. R. Pryor, of Trinity College] brought me from the borders of Surrey (near Horsham, Sussex) were, according to Johnston, *Trocheta subviridis*."...."Johnston has described (Cat. Brit. Mus. Non-Parasit. Worms, 1865) *Trocheta subviridis* from a specimen found in the Regent's Park, London (now in the British Museum). This specimen appears to have been the first taken in this country; at least so it was stated by Dr. Gray, who brought it before the Zoological Society in 1851 (Ann. & Mag. Nat. Hist. ser. 2. vii. 429)." This is followed by a note on the position of the generative organs; for in the specimen dissected I found the ovarian loop which passes below the ganglionic column occupying a position different from that represented by Moquin-Tandon (Hirudinées, t. iv. 1846). I am, Gentlemen,

Your obedient Servant,

J. Gedge.

Anatomical Schools, Cambridge.

Lamarck's Collection of Shells.

The celebrated collections of the Baron B. Delessert passed at his death into the hands of his brother, the Baron F. Delessert; at his death the pictures were sold by auction; and he left his zoological collection, including Lamarck's collection of shells and his herbarium, to the Museum of Natural History of Geneva, this having been his native country. His books, forming the most extensive botanical library in France, were given to the library of the Institut Impérial de France in Paris.—J. E. Gray.

On the Zoological Discoveries recently made in Madagascar by M. Alfred Grandidier. By M. Milne-Edwards.

The existing mammalogical fauna of Madagascar is well known to be very different from that of any other part of the world: it is composed solely of types peculiar to that island; and we do not find in it any representative of the large herbivora which give their most striking characters to the zoological population of Africa and Asia. It might be thought that this was always the case; but the discoveries of M. Grandidier will change the opinion of naturalists on this point. It appears from his observations that, at the more or less distant period when Madagascar was inhabited by the gigantic bird which has been denominated *Æpyornis*, this island also possessed

large Pachydermata very analogous to one of the most remarkable African species; in fact numerous remains of a peculiar species of the genus *Hippopotamus* have just been discovered there.

It was by digging in a marshy soil at Amboulitsate, on the western side of Madagascar, that M. Grandidier ascertained this important fact. He found the remains of about fifty *Hippopotami*, mixed with bones of *Æpyornis* and other animals of extinct species.

The subfossil *Hippopotamus* of Madagascar, which M. Grandidier has inscribed in our zoological catalogues under the name of *Hippopotamus Lemerlei*, is much smaller than *Hippopotamus amphibius*; and, both as regards its size and in several osteological peculiarities, it appears to me to approach closely to the Liberian *Chœropsis*. The following are the details which M. Grandidier has just sent me with regard to this curious pachyderm:—

"The little *Hippopotamus* of Madagascar is distinguished from its African congener (*H. amphibius*) by its much smaller size, and by the conformation of its orbits, which are less prominent laterally and rise but little above the forehead. The postorbital and jugal apophyses are short, and leave more than one-sixth of the orbital ring open; the jugal is more elongated and less prominent outwards than in the common Hippopotamus. The lacrymal bone is more developed in proportion, and less narrowed towards the orbital margin; the posterior surface of the cranium is concave, in consequence of the projection of the occipital crest, which is short and continuous with a tolerably thick and slightly concave sagittal suture; the angle of the arch which roofs the orbit is acute, and the median part of the cranium forms a pretty regular lozenge; the nasal bones are scarcely dilated at their extremity, and the palatines are very narrow; the vertebral aperture of the atlas is divided by an interior semicircular ring, concentric with the superior arch of this vertebra. The odontoid apophysis of the axis is pointed, and presents an articular facet beneath; the spinous apophysis of the same vertebra is tolerably prominent. The ulna is, as usual, soldered to the radius, from which it is distinguished by a furrow perforated at each end; the two bones are much depressed. The pelvis is but slightly developed"*.

* The following are the measurements given by M. Grandidier of the principal bones of this Hippopotamus:—

	metre.
Length of various heads, several of which belong to adult individuals	0·315–0·40
Length of the upper jaw to the level of the second molars	0·06–0·07
Distance of the postorbital processes of the frontal	0·21
Distance of the tuberosities from which the lower canines spring	0·22
Minimum length of the lower jaw	0·15
Length of a fragment of maxillaries of a very young individual (from the last molar to the canine, which is beginning to appear)	0·115
Total length of the femur	0·23

The remains of *Æpyornis*, which M. Grandidier found mixed with these bones of *Hippopotamus*, consist of a fragment of an egg, a tibia 64 centimetres in length*, several fragments of still greater dimensions, a femur, and several vertebræ. The femur is remarkably robust; its diameter, measured at the narrowest point of the diaphysis, is equal to more than one-fourth of the length of the bone†. It is very probable that a profound study of these specimens will throw much light upon the natural affinities of the gigantic bird from which they are derived—a subject for the investigation of which materials have hitherto been wanting.

The same deposit contained other bones of birds, as well as various parts of the skeleton of a land-tortoise, which M. Grandidier regards as constituting a new species, and which he designates under the name of *Testudo abrupta*. This traveller has also found remains of crocodiles; and he is led to believe that all these animals were contemporaneous with the Dodo of the island of Mauritius.

These discoveries, so interesting as regards both geographical zoology and palæontology, are not the only results obtained by M. Grandidier since his return to Madagascar. He has found three new species of Lemuridæ, to which he has given the names of *Chirogalus Samati*, *C. gliroïdes*, and *C. adipicaudatus*, and a new species of tortoise (*Testudo desertorum*). Lastly, he has discovered, in sandy beds at Etséré, a magnificent carapace of an *Emys* (*E. gigantea*, A. Grand.), measuring 132 centimetres in length and 139 centimetres in width, besides several parts of the same animal.—*Comptes Rendus*, December 14, 1868, tome lxvii. pp. 1165–1167.

On the Miocene Alcyonaria of Algeria. By A. Pomel.

The author states that the Miocene strata of Algeria contain the remains of examples of the three chief types of Gorgonidæ, *Corallium*, *Isis*, and *Gorgonia*. Of the former, many fragments occur which are undistinguishable from the *Corallium rubrum* of the neighbouring coast. Allied to this is a new generic type described as *Stolonia saheliensis*. It has a stony, creeping, stoloniform sclerobase; in other words, it is a *Cornularia* with the sclerobase of *Corallium*. The calyces, forming pits with a nearly smooth bottom near the ramifications of the stolons, have left traces of their eight gastric chambers as deep sinuses, separated by ridges indicating the origin of the

* M. Grandidier adds that the two condyles of the bone are not very prominent and are separated by a rather shallow groove, and that the crests of the antero-superior tuberosity are tolerably prominent. Length measured from the antero-superior tuberosity to the outer condyle 64 centimetres; minimum circumference 16 centimetres; length of the inferior extremity 13 centimetres.

† The upper extremity of this femur is partially broken; the air penetrates into it by an orifice situated above the condyles. Length from the head of the bone to the outer condyle 20 centimetres; minimum circumference 27½ centimetres; length of the inferior extremity 19 centimetres.